THE ROCKEFELLER UNIVERSITY

pro bono humani generis

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Dear Dr. Stevenson:

I was most interested to run across the following title (and abstract) in the Biotech SCI 1993.

AU - Stevenson DE Stanley RA Furneaux RH
TI - Optimization of Alkyl Beta-D-Galactopyranoside Synthesis from Lactose Using Commercially Available Beta-Galactosidases.
AD - IND RES LTD, POB 31 310, LOWER HUTT, NEW ZEALAND
SO - BIOTECHNOL BIOENG 1993;42(5):657-666

Could you favor me with a reprint?

Since 1950* I have been intrigued by the possibility of such condensations to help produce galactosides that might otherwise be very difficult to procure -- especially for one like myself not a sugar chemist accustomed to working with acetobrom derivatives and the like.

I am sure you are well acquainted with the use of chromo- and fluoro- genic galactosides as reporters of gene activity in many contexts. Could you use your method to produce, say, "X-gal" (indoxyl-gal.) more cheaply?

A related objective would be conjugates with antibiotics that were themselves not cytotoxic, but could be used to SELECT against cells (bacteria and others) that were capable of cleaving off the aglycone. Butyl=gal. has some feeble activity in that regard. For now, the market would be as a research reagent; but one could imagine prodrugs being elaborated on this principle. As far as I know, none are commercially available at this time.

If this has any interest for you, I would be glad to continue the discussion with suggestions about specific candidates. And of course to test the utility of any samples that might emerge.

Yours sincerely,

Joshua Lederberg

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